BRUHAT BANGALORE MAHANAGARA PALIKE

MEASURMENT SHEETS

Name of the work : Improvements to roads of royal garden layout in ward No.07 & Improvements to drains of Royal Garden in ward No.07, Byatarayanapura

Name of Agency : Ramesh U

Item No:- 1	
Item name:-	KSRRB 300-1. Earthwork excavation by manual means in rodinary soil involving an average horizontal throw upto 2 m and an average lift upto 1.5m, excavated surafce levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking clods complete as per specifications.. Pg No.143.Item No.19.1)

Sl. No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Drain desilting							
	Main Road							
	CH 0.00m to 30.00m		2	30.00	0.60	0.60	21.60	
	CH 30.0m to 60.00m		2	30.00	0.60	0.60	21.60	
	CH 60.00m to 90.00m		2	30.00	0.60	0.60	21.60	
	CH 90.00m to 120.00m		2	30.00	0.60	0.60	21.60	
	CH 120.00m to 150.00m		2	30.00	0.60	0.60	21.60	
	CH 150.00m to 160.00m		2	10.00	0.60	0.60	7.20	
	1st Cross							
	CH 0.00m to 30.00m		2	30.00	0.60	0.60	21.60	
	CH 30.0m to 53.00m		2	23.00	0.60	0.60	16.56	
	2nd Cross							
	CH 0.00m to 30.00m		2	30.00	0.60	0.60	21.60	
	CH 30.0m to 61.00m		2	31.00	0.60	0.60	22.32	
	3rd Cross							
	CH 0.00m to 30.00m		2	30.00	0.60	0.60	21.60	
	CH 30.0m to 60.00m		2	30.00	0.60	0.60	21.60	
	CH 60.00m to 90.00m		2	30.00	0.60	0.60	21.60	
	CH 90.00m to 112.00m		2	22.00	0.60	0.60	15.84	
	4th Cross							
	CH 0.00m to 30.00m		2	30.00	0.60	0.60	21.60	
	CH 30.0m to 60.00m		2	30.00	0.60	0.60	21.60	
	CH 60.00m to 90.00m		2	30.00	0.60	0.60	21.60	
	CH 90.00m to 118.00m		2	28.00	0.60	0.60	20.16	
	4th A Cross							
	CH 0.00m to 26.00m		2	26.00	0.60	0.60	18.72	
	Culverts							
	Royal Garden Entrance		1	14.00	1.50	0.90	18.90	

AE

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

	Kempapura Kuvempu Main Road							
	Culvert-1		1	5.00	1.50	0.90	6.75	
	Culvert-2		1	6.00	1.50	0.90	8.10	
	Culvert-3		1	5.00	1.50	0.90	6.75	
	Culvert-4		1	4.00	1.50	0.90	5.40	
	Culvert-5		1	5.00	1.50	0.90	6.75	
	Culvert-6		1	4.00	1.50	0.90	5.40	
	Culvert-7		1	5.00	1.50	0.90	6.75	
	Culvert-8		1	5.00	1.50	0.90	6.75	
	Culvert-9		1	4.00	1.50	0.90	5.40	
	Culvert-10		1	5.00	1.50	0.90	6.75	
	Culvert-11		1	6.00	1.50	0.90	8.10	
	Culvert-12		1	5.00	1.50	0.90	6.75	
	Culvert-13		1	4.00	1.50	0.90	5.40	
	Rain Water Units							
	Main Road		2	(3.14*1.5*1.5)/4		3.00	10.60	
	1st Cross		2	(3.14*1.5*1.5)/4		3.00	10.60	
	2nd Cross		2	(3.14*1.5*1.5)/4		3.00	10.60	
	3rd Cross		2	(3.14*1.5*1.5)/4		3.00	10.60	
	4th Cross		2	(3.14*1.5*1.5)/4		3.00	10.60	
	4th A Cross		2	(3.14*1.5*1.5)/4		3.00	10.60	
		cum			Net Qty		549.15	
	Item No:- 2							

AE

28/5/19

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Item name:-	KSRB 4-1.3: Providing and laying in position plain cement concrete of nominal mix 1:4:8 using 40mm and down size graded granite metal machine mixed, conrete laid in layers not exceeding 15 cms. Thick well compacted in foundation and plinth, including cost of all materials labour, HOM of machinery, curing complete as per specification . (Pg.No.13, It.4.3)

SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	BS Slab Drain Bottom							
	Main Road							
	CH 0.00m to 30.00m		2	30.00	0.60	0.15	5.40	
	CH 30.0m to 60.00m		2	30.00	0.60	0.15	5.40	
	CH 60.00m to 90.00m		2	30.00	0.60	0.15	5.40	
	CH 90.00m to 120.00m		2	30.00	0.60	0.15	5.40	
	CH 120.00m to 150.00m		2	30.00	0.60	0.15	5.40	
	CH 150.00m to 160.00m		2	10.00	0.60	0.15	1.80	
	1st Cross							
	CH 0.00m to 30.00m		2	30.00	0.60	0.15	5.40	
	CH 30.0m to 53.00m		2	23.00	0.60	0.15	4.14	
	2nd Cross							
	CH 0.00m to 30.00m		2	30.00	0.60	0.15	5.40	
	CH 30.0m to 61.00m		2	31.00	0.60	0.15	5.58	
	3rd Cross							
	CH 0.00m to 30.00m		2	30.00	0.60	0.15	5.40	
	CH 30.0m to 60.00m		2	30.00	0.60	0.15	5.40	
	CH 60.00m to 90.00m		2	30.00	0.60	0.15	5.40	
	CH 90.00m to 112.00m		2	22.00	0.60	0.15	3.96	
	4th Cross							
	CH 0.00m to 30.00m		2	30.00	0.60	0.15	5.40	
	CH 30.0m to 60.00m		2	30.00	0.60	0.15	5.40	
	CH 60.00m to 90.00m		2	30.00	0.60	0.15	5.40	
	CH 90.00m to 118.00m		2	28.00	0.60	0.15	5.04	
	4th A Cross							
	CH 0.00m to 26.00m		2	26.00	0.60	0.15	4.68	
	Culverts Botttom							
	Royal Garden Entrance		1	14.00	1.50	0.15	3.15	
	Kempapura Kuvempu Main Road							
	Culvert-1		1	5.00	1.50	0.15	1.13	
	Culvert-2		1	6.00	1.50	0.15	1.35	
	Culvert-3		1	5.00	1.50	0.15	1.13	
	Culvert-4		1	4.00	1.50	0.15	0.90	
	Culvert-5		1	5.00	1.50	0.15	1.13	
	Culvert-6		1	4.00	1.50	0.15	0.90	
	Culvert-7		1	5.00	1.50	0.15	1.13	
	Culvert-8		1	5.00	1.50	0.15	1.13	
	Culvert-9		1	4.00	1.50	0.15	0.90	
	Culvert-10		1	5.00	1.50	0.15	1.13	
	Culvert-11		1	6.00	1.50	0.15	1.35	
	Culvert-12		1	5.00	1.50	0.15	1.13	
	Culvert-13		1	4.00	1.50	0.15	0.90	
	Ramps for culvert		2	4.00	0.75	0.15	0.90	
			2	4.00	0.75	0.15	0.90	
		cum			Net Qty		114.53	

AEE(Civil) 5/6/19

AEE(Civil) 5/6/19

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Item No:- 3								
Item name:-	KSRB4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs, with 20 mm and down size graded granite matel coarse aggregates @ 0.69 cum and fine aggragtes @ 0.459cum, machine mixed concrete laid in layers not eceeding 15 cms, thick well compacted, in foundation, plinth and cills including cost of all materials, labour HOM machinery curing complate as per specifications. (Page No. 13. Item No. 4.6)							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Culverts SSM Botttom							
	Royal Garden Entrance		1	14.00	0.60	0.15	1.26	
	Kempapura Kuvempu Main Road							
	Culvert-1		1	5.00	0.60	0.15	0.45	
	Culvert-2		1	6.00	0.60	0.15	0.54	
	Culvert-3		1	5.00	0.60	0.15	0.45	
	Culvert-4		1	4.00	0.60	0.15	0.36	
	Culvert-5		1	5.00	0.60	0.15	0.45	
	Culvert-6		1	4.00	0.60	0.15	0.36	
	Culvert-7		1	5.00	0.60	0.15	0.45	
	Culvert-8		1	5.00	0.60	0.15	0.45	
	Culvert-9		1	4.00	0.60	0.15	0.36	
	Culvert-10		1	5.00	0.60	0.15	0.45	
	Culvert-11		1	6.00	0.60	0.15	0.54	
	Culvert-12		1	5.00	0.60	0.15	0.45	
	Culvert-13		1	4.00	0.60	0.15	0.36	
	Coping							
	Royal Garden Entrance		2	14.00	0.60	0.10	1.68	
	Kempapura Kuvempu Main Road							
	Culvert-1		2	5.00	0.60	0.10	0.60	
	Culvert-2		2	6.00	0.60	0.10	0.72	
	Culvert-3		2	5.00	0.60	0.10	0.60	
	Culvert-4		2	4.00	0.60	0.10	0.48	
	Culvert-5		2	5.00	0.60	0.10	0.60	
	Culvert-6		2	4.00	0.60	0.10	0.48	
	Culvert-7		2	5.00	0.60	0.10	0.60	
	Culvert-8		2	5.00	0.60	0.10	0.60	
	Culvert-9		2	4.00	0.60	0.10	0.48	
	Culvert-10		2	5.00	0.60	0.10	0.60	
	Culvert-11		2	6.00	0.60	0.10	0.72	
	Culvert-12		2	5.00	0.60	0.10	0.60	
	Culvert-13		2	4.00	0.60	0.10	0.48	
	Ramps for culvert		2	4.00	0.75	0.10	0.60	
			2	4.00	0.75	0.10	0.60	
		cum			Net Qty		17.37	
					Qty Ltd to		16.38	

AEE(Acct)
13/6/19

M.N.D
AE

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Item No:- 4								
Item name:-	KSRB 5.4-3: Providing and constructing granite / trap / basalt size stone masonry in superstructure with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No.							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Culverts							
	Royal Garden Entrance		2	14.00	0.60	0.90	15.12	
	Kempapura Kuvempu Main Road							
	Culvert-1		2	5.00	0.60	0.90	5.40	
	Culvert-2		2	6.00	0.60	0.90	6.48	
	Culvert-3		2	5.00	0.60	0.90	5.40	
	Culvert-4		2	4.00	0.60	0.90	4.32	
	Culvert-5		2	5.00	0.60	0.90	5.40	
	Culvert-6		2	4.00	0.60	0.90	4.32	
	Culvert-7		2	5.00	0.60	0.90	5.40	
	Culvert-8		2	5.00	0.60	0.90	5.40	
	Culvert-9		2	4.00	0.60	0.90	4.32	
	Culvert-10		2	5.00	0.60	0.90	5.40	
	Culvert-11		2	6.00	0.60	0.95	6.84	
	Culvert-12		2	5.00	0.60	0.95	5.70	
	Culvert-13		2	4.00	0.60	0.95	4.56	
		cum			Net Qty		84.06	

NDD AE(NST) 14/6.

Item No:- 5								
Item name:-	KSRB 15.1.4: Providing ruled pointing to coursed stone masonry with cement mortar 1:4, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications cement mortar 1:4. Page No. 115 / Item No. 15.4 / PWD SR 2018-19							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Culverts							
	Royal Garden Entrance		2	14.00		0.90	25.20	
	Kempapura Kuvempu Main Road							
	Culvert-1		2	5.00		0.90	9.00	
	Culvert-2		2	6.00		0.90	10.80	
	Culvert-3		2	5.00		0.90	9.00	
	Culvert-4		2	4.00		0.90	7.20	
	Culvert-5		2	5.00		0.90	9.00	
	Culvert-6		2	4.00		0.90	7.20	
	Culvert-7		2	5.00		0.90	9.00	
	Culvert-8		2	5.00		0.90	9.00	
	Culvert-9		2	4.00		0.90	7.20	
	Culvert-10		2	5.00		0.90	9.00	
	Culvert-11		2	6.00		0.95	11.40	
	Culvert-12		2	5.00		0.95	9.50	
	Culvert-13		2	4.00		0.95	7.60	
		sqm			Net Qty		140.10	

NDD AE(NST) 15/6

AE N.D

15/6/19

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Item No:- 6								
Item name:-	Providing granite slabs of selected quality roughly dressed and fixed in cementer mortar (1:6) including fixing curing etc., complete. Pg No.27, Item No.5.31.1 (7.5 cms thick)							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
Date of Mreasurments								
	Main Road							
	CH 0.00m to 30.00m		2	30.00	1.35		81.00	
	CH 30.0m to 60.00m		2	30.00	1.35		81.00	
	CH 60.00m to 90.00m		2	30.00	1.35		81.00	
	CH 90.00m to 120.00m		2	30.00	1.35		81.00	
	CH 120.00m to 150.00m		2	30.00	1.35		81.00	
	CH 150.00m to 160.00m		2	10.00	1.35		27.00	
	1st Cross							
	CH 0.00m to 30.00m		2	30.00	1.35		81.00	
	CH 30.0m to 53.00m		2	23.00	1.35		62.10	
	2nd Cross							
	CH 0.00m to 30.00m		2	30.00	1.35		81.00	
	CH 30.0m to 61.00m		2	31.00	1.35		83.70	
	3rd Cross							
	CH 0.00m to 30.00m		2	30.00	1.35		81.00	
	CH 30.0m to 60.00m		2	30.00	1.35		81.00	
	CH 60.00m to 90.00m		2	30.00	1.35		81.00	
	CH 90.00m to 112.00m		2	22.00	1.35		81.00	
	4th Cross							
	CH 0.00m to 30.00m		2	30.00	1.35		81.00	
	CH 30.0m to 60.00m		2	30.00	1.35		81.00	
	CH 60.00m to 90.00m		2	30.00	1.35		81.00	
	CH 90.00m to 118.00m		2	28.00	1.35		75.60	
	4th A Cross							
	CH 0.00m to 26.00m		2	26.00	1.35		70.20	
covering slabs in front of houses			1	5.00	0.60		3.00	
		sqm			Net Qty		1455.30	

Item No:- 7								
Item name:-	Providing and fixing 20 cm thick pre cast RCC covering slab using reinforced cement concrete M 20 mix with stone aggregate 20 mm and down size including centring shuttering reinforcement and bar bending machine mixed concrete laid in layers not exceeding 15 cm thick wellcompacted cost of all materials labour curing comlete as per specification (Data Rate)							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
Date of Mreasurments								
	Culverts							
	Royal Garden Entrance		23	1.80	0.60		24.84	
	Kempapura Kuvempu Main Road							
	Culvert-1		8	1.80	0.60		8.64	
	Culvert-2		10	1.80	0.60		10.80	
	Culvert-3		8	1.80	0.60		8.64	
	Culvert-4		7	1.80	0.60		7.56	
	Culvert-5		8	1.80	0.60		8.64	
	Culvert-6		7	1.80	0.60		7.56	
	Culvert-7		8	1.80	0.60		8.64	
	Culvert-8		8	1.80	0.60		8.64	
	Culvert-9		7	1.80	0.60		7.56	
	Culvert-10		8	1.80	0.60		8.64	

E.E. (Project)

	Culvert-11		10	1.80	0.60		10.80	
	Culvert-12		8	1.80	0.60		8.64	
	Culvert-13		7	1.80	0.60		7.56	
		sqm			Net Qty		137.16	
					Qty limited To		135.00	
Item No:- 8								
Item name:-		KSRRB M100-1 Loading and unloading of stone boulder/stone aggregates/ sand/ kanker/ moorum. KSRRB M100-1:Placing tipper at loading point loading with front end loading, dumping turning for return trip, excluding time for haulage and return trip complete as per specification MORTH Chapter 1 (Page 118, item No. 17.1)						
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
Date of Measurments								
			Qty same as (Item No 1 + Item No 15)				4018.15	
		cum			Net Qty		4018.15	
Item No:- 9								
Item name:-		KSRRB M2900-2.1. Laying Reinforced cement concrete pipe NP4 / prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets complete as per specifications. MORTH Specification No. 2900 B. 1200 mm dia MORTH Specification No. 2900 Page No. 254, Item No. 34.3, PWD SR 2018-19						
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
Date of Mreasurments								
	Rain Water Units							
	Main Road		2			3.00	6.00	
	1st Cross		2			3.00	6.00	
	2nd Cross		2			3.00	6.00	
	3rd Cross		2			3.00	6.00	
	4th Cross		2			3.00	6.00	
	4th A Cross		2			3.00	6.00	
		m			Net Qty		36.00	
Item No:- 9								

Checked
16.4.19
E.E. (Project)

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2/12

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	Item name:- Repeat	KSRRB M2900-2.1. Laying Reinforced cement concrete pipe NP4 / prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets complete as per specifications. MORTH Specification No. 2900 B. 1200 mm dia MORTH Specification No. 2900 Page No. 254, Item No. 34.3, PWD SR 2018-19						
L No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Rain Water Units							
	Main Road		2			3.00	6.00	
	1st Cross		2			3.00	6.00	
	2nd Cross		2			3.00	6.00	
	3rd Cross		2			3.00	6.00	
	4th Cross		2			3.00	6.00	
	4th A Cross		2			3.00	6.00	
		cum			Net Qty		36.00	
	Item No:- 10							
	Item name:-	Providing 100mm and down size nominal size. (Pg No.I.Item No.23)						
L No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Rain Water Units							
	Main Road		2	(3.14*1.2*1.2)/4		1.00	2.26	
	1st Cross		2	(3.14*1.2*1.2)/4		1.00	2.26	
	2nd Cross		2	(3.14*1.2*1.2)/4		1.00	2.26	
	3rd Cross		2	(3.14*1.2*1.2)/4		1.00	2.26	
	4th Cross		2	(3.14*1.2*1.2)/4		1.00	2.26	
	4th A Cross		2	(3.14*1.2*1.2)/4		1.00	2.26	
		cum			Net Qty		13.56	
	Item No:- 11							
	Item name:-	Providing 40mm and down size nominal size (Pg No.II.Item No.25)						
L No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Rain Water Units							
	Main Road		2	(3.14*1.2*1.2)/4		0.50	1.13	
	1st Cross		2	(3.14*1.2*1.2)/4		0.50	1.13	
	2nd Cross		2	(3.14*1.2*1.2)/4		0.50	1.13	
	3rd Cross		2	(3.14*1.2*1.2)/4		0.50	1.13	
	4th Cross		2	(3.14*1.2*1.2)/4		0.50	1.13	
	4th A Cross		2	(3.14*1.2*1.2)/4		0.70	1.50	
		cum			Net Qty		7.15	

AE

Item No:- 12								
Item name:-		Providing 20mm and down size nominal size (Pg No.Ii.Item No.28)						
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
Date of Mreasurments								
	Rain Water Units							
	Main Road		2	(3.14*1.2*1.2)/4		0.30	0.68	
	1st Cross		2	(3.14*1.2*1.2)/4		0.30	0.68	
	2nd Cross		2	(3.14*1.2*1.2)/4		0.30	0.68	
	3rd Cross		2	(3.14*1.2*1.2)/4		0.30	0.68	
	4th Cross		2	(3.14*1.2*1.2)/4		0.30	0.68	
	4th A Cross		2	(3.14*1.2*1.2)/4		0.50	0.95	
		cum			Net Qty		4.35	

Item No:- 13								
Item name:-		Providing Fine aggrgate 2.36mm nominal size (Pg No.Ii.Item No.37)						
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
Date of Mreasurments								
	Rain Water Units							
	Main Road		2	(3.14*1.2*1.2)/4		0.20	0.45	
	1st Cross		2	(3.14*1.2*1.2)/4		0.20	0.45	
	2nd Cross		2	(3.14*1.2*1.2)/4		0.20	0.45	
	3rd Cross		2	(3.14*1.2*1.2)/4		0.30	0.75	
	4th Cross		2	(3.14*1.2*1.2)/4		0.30	0.75	
	4th A Cross		2	(3.14*1.2*1.2)/4		0.30	0.75	
		cum			Net Qty		3.60	

Item No:- 14								
Item name:-		Providing and fixing MS Grating 260x260 mm(Page No.1X, Sl No.234, code No.0771)						
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
Date of Mreasurments								
	Rain Water Units							
	Main Road		4				4.00	
	1st Cross		4				4.00	
	2nd Cross		4				4.00	
	3rd Cross		4				4.00	
	4th Cross		4				4.00	
	4th A Cross		4				4.00	
		nos			Net Qty		24.00	

AE

Item No:- 15								
Item name:-	KSRRB M300- Scarifying Existing Granular Surface to a Depth of 50mm by Manual Means. KSRRB M300-52.1. Scarifying the existing granular road surface to a depth of 50mm and disposal of scarified material and complete as per specifications. MORTH Specification No. 305.4.3 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work(P-146 dt.Nov.10 58)							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Main Road							
	CH 0.00m to 15.00m		1	15.00	(6+6.1)/2		90.75	
	CH 15.0m to 30.00m		1	15.00	(6.1+6)/2		90.75	
	CH 30.00m to 45.00m		1	15.00	(6+6.1)/2		90.75	
	CH 45.00m to 60.00m		1	15.00	(6.1+6.)/2		90.75	
	CH 60.00m to 75.00m		1	15.00	(6+6)/2		90.00	
	CH 75.00m to 90.00m		1	15.00	(6+6.4)/2		93.00	
	CH 90.00m to 105.00m		1	15.00	(6.4+6.4)/2		96.00	
	CH 105.0m to 120.00m		1	15.00	(6.4+6.7)/2		98.25	
	CH 120.00m to 135.00m		1	15.00	(6.7+6.7)/2		100.50	
	CH 135.00m to 150.00m		1	15.00	(6.7+6.6)/2		99.75	
	CH 150.00m to 165.00m		1	15.00	(6.6+6.6)/2		99.00	
	CH 165.00m to 171.00m		1	6.00	(6.6+7)/2		40.80	
	1st Cross							
	CH 0.00m to 15.00m		1	15.00	(4.8+4.9)/2		72.75	
	CH 15.0m to 30.00m		1	15.00	(4.9+4.9)/2		73.50	
	CH 30.00m to 45.00m		1	15.00	(4.9+5.6)/2		78.75	
	CH 45.00m to 53.00m		1	8.00	(5.6+5.2)/2		43.20	
	2nd Cross							
	CH 0.00m to 15.00m		1	15.00	(5+5)/2		75.00	
	CH 15.0m to 30.00m		1	15.00	(5+5)/2		75.00	
	CH 30.00m to 45.00m		1	15.00	(5+5.1)/2		75.75	
	CH 45.00m to 61.00m		1	16.00	(5.1+5)/2		80.80	
	3rd Cross							
	CH 0.00m to 15.00m		1	15.00	(6.5+5.5)/2		90.00	
	CH 15.0m to 30.00m		1	15.00	(5.5+5.4)/2		81.75	
	CH 30.00m to 45.00m		1	15.00	(5.4+5.1)/2		78.75	
	CH 45.00m to 60.00m		1	15.00	(5.1+5.2)/2		77.25	
	CH 60.00m to 75.00m		1	15.00	(5.2+5.3)/2		78.75	
	CH 75.00m to 90.00m		1	15.00	(5.3+5.4)/2		80.25	
	CH 90.00m to 105.00m		1	15.00	(5.4+5.1)/2		78.75	
	CH 105.0m to 112.00m		1	7.00	(5.1+5.9)/2		38.50	
	4th Cross							
	CH 0.00m to 15.00m		1	15.00	(5.9+5.5)/2		85.50	
	CH 15.0m to 30.00m		1	15.00	(5.5+5.8)/2		84.75	
	CH 30.00m to 45.00m		1	15.00	(5.8+5.9)/2		87.75	
	CH 45.00m to 60.00m		1	15.00	(5.9+6)/2		89.25	
	CH 60.00m to 75.00m		1	15.00	(6+6.1)/2		90.75	
	CH 75.00m to 90.00m		1	15.00	(6.1+6.2)/2		92.25	
	CH 90.00m to 105.00m		1	15.00	(6.2+5.7)/2		89.25	
	CH 105.0m to 118.00m		1	13.00	(5.7+5.6)/2		73.45	
	4th A Cross							
	CH 0.00m to 15.00m		1	15.00	(5.1+4.9)/2		75.00	
	CH 15.0m to 26.00m		1	11.00	(4.9+4)/2		48.95	
	cross road		1	75.00	(5.2+5.3)/2		393.75	
		sqm				Net Qty	3469.00	

AE

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Item No:- 16								
Item name:-	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications.(which includes cost of gravel / murrum, watering charges & compaction by vibratory roller)(P-147 , It Nos 10.60)							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Main Road							
	CH 0.00m to 15.00m		1	15.00	(6+6.1)/2	0.30	27.23	
	CH 15.0m to 30.00m		1	15.00	(6.1+6)/2	0.30	27.23	
	CH 30.00m to 45.00m		1	15.00	(6+6.1)/2	0.30	27.23	
	CH 45.00m to 60.00m		1	15.00	(6.1+6.)/2	0.30	27.23	
	CH 60.00m to 75.00m		1	15.00	(6+6)/2	0.30	27.00	
	CH 75.00m to 90.00m		1	15.00	(6+6.4)/2	0.30	27.90	
	CH 90.00m to 105.00m		1	15.00	(6.4+6.4)/2	0.30	28.80	
	CH 105.0m to 120.00m		1	15.00	(6.4+6.7)/2	0.30	29.48	
	CH 120.00m to 135.00m		1	15.00	(6.7+6.7)/2	0.30	30.15	
	CH 135.00m to 150.00m		1	15.00	(6.7+6.6)/2	0.30	29.93	
	CH 150.00m to 165.00m		1	15.00	(6.6+6.6)/2	0.30	29.70	
	CH 165.00m to 171.00m		1	6.00	(6.6+7)/2	0.30	12.24	
	1st Cross							
	CH 0.00m to 15.00m		1	15.00	(4.8+4.9)/2	0.30	21.83	
	CH 15.0m to 30.00m		1	15.00	(4.9+4.9)/2	0.30	22.05	
	CH 30.00m to 45.00m		1	15.00	(4.9+5.6)/2	0.30	23.63	
	CH 45.00m to 53.00m		1	8.00	(5.6+5.2)/2	0.30	12.96	
	2nd Cross							
	CH 0.00m to 15.00m		1	15.00	(5+5)/2	0.30	22.50	
	CH 15.0m to 30.00m		1	15.00	(5+5)/2	0.30	22.50	
	CH 30.00m to 45.00m		1	15.00	(5+5.1)/2	0.30	22.73	
	CH 45.00m to 61.00m		1	16.00	(5.1+5)/2	0.30	24.24	
	3rd Cross							
	CH 0.00m to 15.00m		1	15.00	(6.5+5.5)/2	0.30	27.00	
	CH 15.0m to 30.00m		1	15.00	(5.5+5.4)/2	0.30	24.53	
	CH 30.00m to 45.00m		1	15.00	(5.4+5.1)/2	0.30	23.63	
	CH 45.00m to 60.00m		1	15.00	(5.1+5.2)/2	0.30	23.18	
	CH 60.00m to 75.00m		1	15.00	(5.2+5.3)/2	0.30	23.63	
	CH 75.00m to 90.00m		1	15.00	(5.3+5.4)/2	0.30	24.08	
	CH 90.00m to 105.00m		1	15.00	(5.4+5.1)/2	0.30	23.63	
	CH 105.0m to 112.00m		1	7.00	(5.1+5.9)/2	0.30	11.55	
	4th Cross							
	CH 0.00m to 15.00m		1	15.00	(5.9+5.5)/2	0.30	25.65	
	CH 15.0m to 30.00m		1	15.00	(5.5+5.8)/2	0.30	25.43	
	CH 30.00m to 45.00m		1	15.00	(5.8+5.9)/2	0.30	26.33	
	CH 45.00m to 60.00m		1	15.00	(5.9+6)/2	0.30	26.78	
	CH 60.00m to 75.00m		1	15.00	(6+6.1)/2	0.30	27.23	
	CH 75.00m to 90.00m		1	15.00	(6.1+6.2)/2	0.30	27.68	
	CH 90.00m to 105.00m		1	15.00	(6.2+5.7)/2	0.30	26.78	
	CH 105.0m to 118.00m		1	13.00	(5.7+5.6)/2	0.30	22.04	
	4th A Cross							
	CH 0.00m to 15.00m		1	15.00	(5.1+4.9)/2	0.35	26.25	
	CH 15.0m to 26.00m		1	11.00	(4.9+4)/2	0.35	17.13	
	cross road		1	75	(5.2+5.3)/2	0.30	118.13	
		cum			Net Qty		1047.11	

NDD
AE(Ast)
12/7

AE

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Item No:- 17	
Item name:-	Providing laying, spreading and compacting graded fine aggregate to wet mix macadam specificationns including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surfce and compating with vibratory roller to achieve the desired density complete as per specifications. MORTH specifications no. 406(P-155., It No: 20.18)

SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Main Road							
	CH 0.00m to 15.00m		1	15.00	(6+6.1)/2	0.23	20.87	
	CH 15.0m to 30.00m		1	15.00	(6.1+6)/2	0.23	20.87	
	CH 30.00m to 45.00m		1	15.00	(6+6.1)/2	0.23	20.87	
	CH 45.00m to 60.00m		1	15.00	(6.1+6.)/2	0.23	20.87	
	CH 60.00m to 75.00m		1	15.00	(6+6)/2	0.23	20.70	
	CH 75.00m to 90.00m		1	15.00	(6+6.4)/2	0.23	21.39	
	CH 90.00m to 105.00m		1	15.00	(6.4+6.4)/2	0.23	22.08	
	CH 105.0m to 120.00m		1	15.00	(6.4+6.7)/2	0.23	22.60	
	CH 120.00m to 135.00m		1	15.00	(6.7+6.7)/2	0.23	23.12	
	CH 135.00m to 150.00m		1	15.00	(6.7+6.6)/2	0.23	22.94	
	CH 150.00m to 165.00m		1	15.00	(6.6+6.6)/2	0.23	22.77	
	CH 165.00m to 171.00m		1	6.00	(6.6+7)/2	0.23	9.38	
	1st Cross							
	CH 0.00m to 15.00m		1	15.00	(4.8+4.9)/2	0.23	16.73	
	CH 15.0m to 30.00m		1	15.00	(4.9+4.9)/2	0.23	16.91	
	CH 30.00m to 45.00m		1	15.00	(4.9+5.6)/2	0.23	18.11	
	CH 45.00m to 53.00m		1	8.00	(5.6+5.2)/2	0.23	9.94	
	2nd Cross							
	CH 0.00m to 15.00m		1	15.00	(5+5)/2	0.23	17.25	
	CH 15.0m to 30.00m		1	15.00	(5+5)/2	0.23	17.25	
	CH 30.00m to 45.00m		1	15.00	(5+5.1)/2	0.23	17.42	
	CH 45.00m to 61.00m		1	16.00	(5.1+5)/2	0.23	18.58	
	3rd Cross							
	CH 0.00m to 15.00m		1	15.00	(6.5+5.5)/2	0.23	20.70	
	CH 15.0m to 30.00m		1	15.00	(5.5+5.4)/2	0.23	18.80	
	CH 30.00m to 45.00m		1	15.00	(5.4+5.1)/2	0.23	18.11	
	CH 45.00m to 60.00m		1	15.00	(5.1+5.2)/2	0.23	17.77	
	CH 60.00m to 75.00m		1	15.00	(5.2+5.3)/2	0.23	18.11	
	CH 75.00m to 90.00m		1	15.00	(5.3+5.4)/2	0.23	18.46	
	CH 90.00m to 105.00m		1	15.00	(5.4+5.1)/2	0.23	18.11	
	CH 105.0m to 112.00m		1	7.00	(5.1+5.9)/2	0.23	8.86	
	4th Cross							
	CH 0.00m to 15.00m		1	15.00	(5.9+5.5)/2	0.20	17.10	
	CH 15.0m to 30.00m		1	15.00	(5.5+5.8)/2	0.20	16.95	
	CH 30.00m to 45.00m		1	15.00	(5.8+5.9)/2	0.20	17.55	
	CH 45.00m to 60.00m		1	15.00	(5.9+6)/2	0.20	17.85	
	CH 60.00m to 75.00m		1	15.00	(6+6.1)/2	0.20	18.15	
	CH 75.00m to 90.00m		1	15.00	(6.1+6.2)/2	0.20	18.45	
	CH 90.00m to 105.00m		1	15.00	(6.2+5.7)/2	0.20	17.85	
	CH 105.0m to 118.00m		1	13.00	(5.7+5.6)/2	0.20	14.69	
	4th A Cross							
	CH 0.00m to 15.00m		1	15.00	(5.1+4.9)/2	0.23	17.25	
	CH 15.0m to 26.00m		1	11.00	(4.9+4)/2	0.23	11.26	
	cross road		1	75	(5.2+5.3)/2	0.23	90.56	
		cum			Net Qty		777.17	

NDP
AE (Civil)
20/7

AE

20/7/17

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Item No:- 18								
Item name:-	KSRRB 500-07: Providing and applying primer coat with S.S Bitumen emulsion on prepared surfaces of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.6okg/sqm using mechanical means complete as per specifications.. (Pg No. 158. Item No. 21.6)							
SL No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Main Road							
	CH 0.00m to 15.00m		1	15.00	(6+6.1)/2		90.75	
	CH 15.0m to 30.00m		1	15.00	(6.1+6)/2		90.75	
	CH 30.00m to 45.00m		1	15.00	(6+6.1)/2		90.75	
	CH 45.00m to 60.00m		1	15.00	(6.1+6.)/2		90.75	
	CH 60.00m to 75.00m		1	15.00	(6+6)/2		90.00	
	CH 75.00m to 90.00m		1	15.00	(6+6.4)/2		93.00	
	CH 90.00m to 105.00m		1	15.00	(6.4+6.4)/2		96.00	
	CH 105.0m to 120.00m		1	15.00	(6.4+6.7)/2		98.25	
	CH 120.00m to 135.00m		1	15.00	(6.7+6.7)/2		100.50	
	CH 135.00m to 150.00m		1	15.00	(6.7+6.6)/2		99.75	
	CH 150.00m to 165.00m		1	15.00	(6.6+6.6)/2		99.00	
	CH 165.00m to 171.00m		1	6.00	(6.6+7)/2		40.80	
	1st Cross							
	CH 0.00m to 15.00m		1	15.00	(4.8+4.9)/2		72.75	
	CH 15.0m to 30.00m		1	15.00	(4.9+4.9)/2		73.50	
	CH 30.00m to 45.00m		1	15.00	(4.9+5.6)/2		78.75	
	CH 45.00m to 53.00m		1	8.00	(5.6+5.2)/2		43.20	
	2nd Cross							
	CH 0.00m to 15.00m		1	15.00	(5+5)/2		75.00	
	CH 15.0m to 30.00m		1	15.00	(5+5)/2		75.00	
	CH 30.00m to 45.00m		1	15.00	(5+5.1)/2		75.75	
	CH 45.00m to 61.00m		1	16.00	(5.1+5)/2		80.80	
	3rd Cross							
	CH 0.00m to 15.00m		1	15.00	(6.5+5.5)/2		90.00	
	CH 15.0m to 30.00m		1	15.00	(5.5+5.4)/2		81.75	
	CH 30.00m to 45.00m		1	15.00	(5.4+5.1)/2		78.75	
	CH 45.00m to 60.00m		1	15.00	(5.1+5.2)/2		77.25	
	CH 60.00m to 75.00m		1	15.00	(5.2+5.3)/2		78.75	
	CH 75.00m to 90.00m		1	15.00	(5.3+5.4)/2		80.25	
	CH 90.00m to 105.00m		1	15.00	(5.4+5.1)/2		78.75	
	CH 105.0m to 112.00m		1	7.00	(5.1+5.9)/2		38.50	
	4th Cross							
	CH 0.00m to 15.00m		1	15.00	(5.9+5.5)/2		85.50	
	CH 15.0m to 30.00m		1	15.00	(5.5+5.8)/2		84.75	
	CH 30.00m to 45.00m		1	15.00	(5.8+5.9)/2		87.75	
	CH 45.00m to 60.00m		1	15.00	(5.9+6)/2		89.25	
	CH 60.00m to 75.00m		1	15.00	(6+6.1)/2		90.75	
	CH 75.00m to 90.00m		1	15.00	(6.1+6.2)/2		92.25	
	CH 90.00m to 105.00m		1	15.00	(6.2+5.7)/2		89.25	
	CH 105.0m to 118.00m		1	13.00	(5.7+5.6)/2		73.45	
	4th A Cross							
	CH 0.00m to 15.00m		1	15.00	(5.1+4.9)/2		75.00	
	CH 15.0m to 26.00m		1	11.00	(4.9+4)/2		48.95	
	cross road	0	1	75	(5.2+5.3)/2		393.75	
		sqm			Net Qty		3469.00	

AE

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Item No:- 19	
Item name:-	Providing and laying bituminous concrete40MM thick with hotmix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filleeer, transporting of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with paver finisher to the required gradde, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to acheive the desired compaction as per MORTH specifications clause No.509 complete in all respects complete as per specifications. using 40/60 TPH capacity H.M.P with mechanical paver Gr-11(30mm to 45mm) with 5.4% of modified binder consisting of 4.97% VG-10 bitumen (80/100) grade and 0.43% of plastomeric thermoplastics(Waste plastic)(Page No.170, It

L No	Particulars	Unit	Nos	L	B	D	Qty	Remarks
1	2	3	4	5	6	7	8	9
	Date of Mreasurments							
	Main Road							
	CH 0.00m to 15.00m		1	15.00	(6+6.1)/2	0.04	3.63	
	CH 15.0m to 30.00m		1	15.00	(6.1+6)/2	0.04	3.63	
	CH 30.00m to 45.00m		1	15.00	(6+6.1)/2	0.04	3.63	
	CH 45.00m to 60.00m		1	15.00	(6.1+6.)/2	0.04	3.63	
	CH 60.00m to 75.00m		1	15.00	(6+6)/2	0.04	3.60	
	CH 75.00m to 90.00m		1	15.00	(6+6.4)/2	0.04	3.72	
	CH 90.00m to 105.00m		1	15.00	(6.4+6.4)/2	0.04	3.84	
	CH 105.0m to 120.00m		1	15.00	(6.4+6.7)/2	0.04	3.93	
	CH 120.00m to 135.00m		1	15.00	(6.7+6.7)/2	0.04	4.02	
	CH 135.00m to 150.00m		1	15.00	(6.7+6.6)/2	0.04	3.99	
	CH 150.00m to 165.00m		1	15.00	(6.6+6.6)/2	0.04	3.96	
	CH 165.00m to 171.00m		1	6.00	(6.6+7)/2	0.04	1.63	
	1st Cross							
	CH 0.00m to 15.00m		1	15.00	(4.8+4.9)/2	0.04	2.91	
	CH 15.0m to 30.00m		1	15.00	(4.9+4.9)/2	0.04	2.94	
	CH 30.00m to 45.00m		1	15.00	(4.9+5.6)/2	0.04	3.15	
	CH 45.00m to 53.00m		1	8.00	(5.6+5.2)/2	0.04	1.73	
	2nd Cross							
	CH 0.00m to 15.00m		1	15.00	(5+5)/2	0.04	3.00	
	CH 15.0m to 30.00m		1	15.00	(5+5)/2	0.04	3.00	
	CH 30.00m to 45.00m		1	15.00	(5+5.1)/2	0.04	3.03	
	CH 45.00m to 61.00m		1	16.00	(5.1+5)/2	0.04	3.23	
	3rd Cross							
	CH 0.00m to 15.00m		1	15.00	(6.5+5.5)/2	0.04	3.60	
	CH 15.0m to 30.00m		1	15.00	(5.5+5.4)/2	0.04	3.27	
	CH 30.00m to 45.00m		1	15.00	(5.4+5.1)/2	0.04	3.15	
	CH 45.00m to 60.00m		1	15.00	(5.1+5.2)/2	0.04	3.09	
	CH 60.00m to 75.00m		1	15.00	(5.2+5.3)/2	0.04	3.15	
	CH 75.00m to 90.00m		1	15.00	(5.3+5.4)/2	0.04	3.21	
	CH 90.00m to 105.00m		1	15.00	(5.4+5.1)/2	0.04	3.15	
	CH 105.0m to 112.00m		1	7.00	(5.1+5.9)/2	0.04	1.54	

S.E. (Project)

AE

	4th Cross							
	CH 0.00m to 15.00m		1	15.00	(5.9+5.5)/2	0.04	3.42	
	CH 15.0m to 30.00m		1	15.00	(5.5+5.8)/2	0.04	3.39	
	CH 30.00m to 45.00m		1	15.00	(5.8+5.9)/2	0.04	3.51	
	CH 45.00m to 60.00m		1	15.00	(5.9+6)/2	0.04	3.57	
	CH 60.00m to 75.00m		1	15.00	(6+6.1)/2	0.04	3.63	
	CH 75.00m to 90.00m		1	15.00	(6.1+6.2)/2	0.04	3.69	
	CH 90.00m to 105.00m		1	15.00	(6.2+5.7)/2	0.04	3.57	
	CH 105.0m to 118.00m		1	13.00	(5.7+5.6)/2	0.04	2.94	
	4th A Cross							
	CH 0.00m to 15.00m		1	15.00	(5.1+4.9)/2	0.04	3.00	
	CH 15.0m to 26.00m		1	11.00	(4.9+4)/2	0.04	1.96	
	cross road		1	75	(5.2+5.3)/2	0.04	15.75	
					Net Qty		138.76	

Checked.

E.E. (Project) 4/12/19

A.E.D.

Assistant Engineer
Ward No.07

2/12/19

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Executive Engineer

AEE
AE (Ward)
2/12